

# American Farmer,



AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

"O FORTUNATOS NIMIUM SUA SI BONA NORINT  
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## THE AMERICAN FARMER.

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A communication, post-marked "Boston," on the subject of Ploughs, and detailing the result of trials thereof, has been received; it shall be published with pleasure if the writer will give us his name as authority for the statements contained therein.

English Agriculture.—Mr. Hananm's paper on this subject is continued in to-day's number. The ability with which it is written, and the interesting nature of the facts developed, will command for it attentive readers.

From the Transactions of the N. Y. Agricultural Society.  
ENGLISH AGRICULTURE—A GLANCE AT ITS PROGRESS AND PROSPECTS.

By John Hannam, North Deighton, Wetherby, Yorkshire, England.—(Continued.)

To trace the progress of the practice of agriculture since the period when it was beginning to be considered a branch of natural science, and capable of elucidation by the application of the true rules of philosophy, is not our aim. From the first birth of this principle, as we have already shown, it was some time before it became visible upon the practice. Although in the Elizabethan age, the profession became more fashionable, though Fitzherbert, Tusser and Platt, the three first writers on the subject, collected the well tried axioms of the ancients, and urged many practices which had been neglected; their works show us what an educated amateur considered ought to be done rather than what was done, in the 16th century; and it was not until the middle of the 17th, that in the writings of Bligh and Weston we see the actual operation of the spirit of change. By the former, (in 1652,) we have recommended the cultivation of clover. And by the latter (1684) the turnip as the winter fodder, the use of which crops have completely revolutionized the state of agriculture. But it was not till the next century, that they came fairly into use, from which time the present practice may be said to date its existence; nor till some time after this, that the triumph of the modern spirit of improvement became fully developed. The bold views of Tull, (1740) gave at once the finish to the new system of cropping (which arose from the growth of clover and turnips,) and a lasting impulse to the principle which had produced the change. In the practical labors of Bakewell, and the Messrs. Culley, and the endeavors of such men as Lord Kames, "to improve agriculture by subjecting it to the test of rational principles," we see the continued influence of the new born spirit of progress, and in the present position of English agriculture, the results of that operation. The nature of this position will be seen in its elevated standing and high estimation as a science, which have secured to it within the last 15 years, the labors of such men as Davy, Sinclair, Daubeny, Henslowe, Johnston, Loudon, Lowe, Stephens, John on, and Madden, and aid of professors at our universities, and the united effort of more than three hundred societies, established for the purpose of elucidating truth, discerning error, and promulgating the latest improvements in the theory

or the practice of agriculture—societies too, patronized by all that have a name or a standing in the country. Thus the Royal Society of England, though but of 3 years standing, possesses not merely the sufferance, or passive patronage of royalty, but the active support of that illustrious individual, who, it is reported, is soon to assume the dignity of King Consort,\* and of more than five thousand other members.

Its position as a practice exhibits an equal advance. The first and chief evidence of this, which we shall notice, is seen in the change from the old infield and outfield system, and the alternate crop and fallow, or two crops and a fallow, to the present system of drill husbandry, and the rotation of barley, clover, wheat and fallow upon stiff land; and of barley, clover, wheat and turnips upon light and dry soils. The first advantage arising from this change, on strong land, is the gain of a crop instead of a fallow, and as this crop is one of fodder or pasturage, the consequent ability to supply the market with a greater weight of stock; the second is an increase of fertility in the soil from the increased quality of manure made upon the farm; the third is a better chance of the wheat crop from its natural liking to follow clover; and the fourth an increase of fertility in every crop from the drill system and from the facility with which weeds may be extirpated, half a fallow made, and the soil at the roots of the plant stirred—a practice which theory and experience prove to be highly beneficial to vegetation.

But this is not all; by the introduction of the mangel wurtzel, the carrot, &c. into cultivation, the farmer is at times able to do without a fallow in the rotation. By judicious and effectual drainage, subsoil-ploughing, many farmers can grow turnips on this stiff land; and it is yet a *questio vexata* whether or not the fallow may not be entirely dispensed with. This is certain, however, that many of the best practical men of the day think it possible, and many upon a few fields which are thoroughly drained, do dispense with the fallow and produce a fair turnip crop. And I have no doubt but that either this or some other green crop will, in the course of time extend the system, so that the fallow will become the exception and not the rule, for the old idea that the land wants rest is quite abandoned.

The effect of the turnip and clover husbandry upon the light and thin soils of England is still more marked. Without fodder, it is an old axiom, there is no cattle, without cattle no manure, and without manure no corn. The total abolition of the fallow, and the substitution of two crops of green food, has, therefore, upon the light lands, produced in a greater degree those advantages which we have enumerated as having arisen by a partial adoption of the same system upon the heavy lands of England. Moreover the treading of sheep has a most beneficial effect; so that those soils, which formerly would scarcely return the seed, now produce as fine crops of corn [wheat] as can be met with in England. The Yorkshire and Lincolnshire wolds are startling evidences of the truth of this; and I can look out at the present moment upon 500 acres of thin limestone soil which 50 years ago paid, and with difficulty, 5 shillings per acre rent, and which now are let at 25 shillings per acre. That the produce has increased in an equal or greater ratio than the rent, is evidenced by the prosperity of the present tenants. I know

\*This is the report since the Prince of Wales' birth. It is to prevent a confusion of names and the unpleasant circumstance of the son taking precedence of the father. Prince Albert is now a Governor of the Royal Agricultural Society, and has taken into his own hands a farm at Windsor. He was also elected on the 12th of this month, (Dec. 1841,) a member of the Smithfield Club.

also a village a few miles from the city of York, the soil on one side of which is strong and deep, and on the other of light texture upon a limestone base. Not many years ago several farms of the heavy land were exchanged for twice the quantity of high land, the latter being considered very bad. At the present time, however, this *quondam* bad land, by the turnip and seed management, and the use of bones and rape dust, is considered the crack land of the district, and is letting at £2 and £2 10s. per acre, while the heavy soils on the other side of the village are not worth more than 15 shillings per acre, as they are not drained, and cannot be managed upon the improved system.

But there are several other rotations of cropping used in particular localities; but as they, for the most part, depend upon the same principle as the one we have noticed, they are but exceptions to the general rule, and space will not allow us to particularise them.

The next evidence of the improved practice of the present time is seen in the variety of crops. Wheat is no longer a partial crop—one produced in the garden soils of England—but is the farmer's *paying* crop. Countless varieties of seed are to be found adapted to almost every variety of soil and climate. In barley, oats, beans, peas, tares, rye, potatoes, turnips, carrots, parsnips, mangel-wurtzel, hops, line, and the artificial grasses, the same endless varieties are used, each variety being selected for some peculiar quality. In this small township, last year, I counted no less than fifteen varieties of turnips. Six sorts I myself introduced from the splendid stock of Mr. Matson, of Wingham, Kent. None of the sorts have been grown here before, and they have answered so well in what is called a bad year, that I have no doubt but in a year or two they will be extensively used in this part of the country, to the equal benefit of the purchaser and the producer of the seed. Now, in every article of produce the same improvement is yearly progressing, because farmers are no longer averse to *rational experiments*, and not so much prejudiced in favor of old plans. It is, consequently, worth the while of such men as Mr. Maison, Mr. Skirving, (of Liverpool,) *cum multis aliis*, to devote their time, talents and capital, in raising the best and most pure varieties of seed.

In manures we have manifest the results of the same spirit. Along with a greater skill in the economy of the manure heap, an increasing use and saving of the liquid from the cattle yard, and a more judicious application of the various composts which have been employed for ages, we have now in use a variety of hand tillages which are of modern date, at least as far as regards their general use, amongst which we may mention bones, rape dust, nitrate of potash, nitrate of soda, gypsum, arate, common salt, soot, Lance's carbon, Lance's humus, Clarke's dessicated compost, Poittevin's disinfected manure, Alexander's Chinese manure, rags, graves, soap-ashes, &c. &c.

Of the change in gricultural implements, it is unnecessary to say that it has been wonderful. The transition from the state of things under which the hammer and the axe were the alpha and the omega of the farmer's stock of implements, (when it was a *qua non* amongst the ploughman's qualifications to be able to make his own plough,) is evident to all. If, however, we look at the advance in the mechanism of implements within the last few years, and take into account the time in which the several changes have taken place, we shall at once allow the part to be more astonishing than the whole; that the improvements made in the last dozen years are far more marked than all that were made previously. The fact is that the exhibitions and rewards of our agricultural societies have given an impetus to the spirit of experimental research in the bosom of the mechanic, and the result is an advance



in knowledge equal to that in any other branch of the practice of agriculture, by the adoption and agency of the same spirit. A practical commentary upon these remarks is offered by the fact that the one maker (*Ransome Ipswich*) exhibited no less than thirty-six varieties of ploughs at the last meeting of the Royal Agricultural Society of England.

In the live stock of the farm the working and the results of the same spirit are apparent. About ten years after Tull launched boldly the barque of theoretical agriculture, and set open forever the door of improvement, Mr. Bakewell commenced those experiments upon breeding, which, as he based them upon rational principles, and upon a deep and observing knowledge of the nature of the animals he wished to improve, were attended with the most decided success. Thus the sheep which he introduced, and the Messrs. Culley carried to perfection, possessed the quality of being fatted at little more than two years old, while the old breed were scarcely ever fit for the shambles till they were twice that age. This advantage was appreciated, for we know that one of his rams was let for the season for 800 guineas, and that the produce of one ewe and one birth (three rams) were let for 1200 guineas. His bulls, too, fetched 108 and 150 guineas each. Since this time, breeding has continued to be a branch of agricultural science by no means attained without time and study and capital. Yet it is still growing more and more popular; and although the gradual diffusion of the sheep and cattle descended from Mr. Bakewell's stock has reduced the prices, a good animal of any pure breed is yet sought after with avidity, and purchased at a sum far above his intrinsic value for any other purpose than breeding. Thus we read that Mr. Jonas Webb, of Babraham, Sussex, let a Southdown ram for 100 guineas, to the Duke of Richmond, at his last show; and, (I take the first case which comes to my hand,) Mr. Smith, of Burley, let fifty-one rams at an average of £10 4s. each, and twelve at an average of £18 10s. The following statement of the prices fetched by animals of the Short Horn, Hereford, Sussex and Devon breeds, at the latest sales of each sort which we can meet with, will show in what estimation well bred cattle are held. Thus,

## SHORT HORNS.

## Bulls.

	Guineas.
"Buchan Hero," (prize bull at Berwick) sold to Messrs Whitaker & Tempest, Yorkshire, for	200
Messrs. Higginson & Wilson's "Sir Thomas Fairfax," for	155
Mr. Jacques' (Richmond, Yorkshire) "Clementi,"	150
Mr. Wilson's (Yorkshire) "Young Sir Watkin,"	100
<i>Cows.</i>	
Mr. Jacques' "Metmaid,"	165
do "Golden Drop,"	160
do "Lady Ann,"	135
do "Rachel,"	100
Mr. Higginson's (Yorkshire) "Amazon,"	135
do do "Alexandrina,"	240
Mr. Wilson's "Brawith Bub,"	216
<i>Calves.</i>	
Mr. Jacques' bull calf, "Dulcimer,"	105
do heifer calf, "Hispodamia,"	60
do do "Purity,"	51
Mr. Wilson's do "Snowdrop,"	60
do do "White Rose,"	42

## HEREFORDS.

## Bulls.

Mr. Price's "Tramp,"	100
do "Trueboy,"	140
do "Washington,"	166
do "Murphy Delany,"	110
do "The Rejected,"	110
do "Victory,"	100
<i>Cows.</i>	
Mr. Price's "Wood Pigeon,"	150
do "Ceres,"	115
do "Tuberosa,"	100
<i>Calves.</i>	
Mr. Price's 12 bull calves at average price of £42 10s. each.	
do 10 heifers calves do do 27 3s. 4d. do.	

## SUSSEX.

## Bulls.

Mr. Putland's old bull,	62
<i>Cows.</i>	
do one at	60
do do	60

## DEVONS.

## Bulls.

One of Mr. Quartley's (Molland) 18 months,	97
do do do "Comely,"	53
<i>Calves.</i>	
One at	211
do do	181

At Mr. Parkinson's sale last year, (1840) the "Adelaide" sold for 220 guineas, and a bull calf, ("Collard," ) for 200.

To pigs, if possible, greater attention is paid than to any other animals. The pig is the poor man's stock, and of course is his study, so that a knowledge of his "points" and qualities is more generally diffused than of any other animal. The poor man loves his pig; he looks upon him as his winter food, and it is rare that we find him ignorant of what sort of an animal will turn out well. Rare too, is it, to find the pig badly kept. The "pig first, and family next," is the motto of many. "We had better be pinched in summer than in winter," was the expression of one who practised this principle. Still more rare, therefore, is it to find that the cottager's judgment and care are thrown away. The individual I alluded to above, is an instance: This pig, though of the short eared breed, at 12 months old took the first premium, at the Wetherby meeting, as "the best fair pig," and at 15 months, produced 440 lbs. of bacon.

At the last pig sale in this neighborhood, four young sows of the Rev. Mr. Higginson, fetched £75; and three, at 3 months old, sold for £45.

Of the value, however, of our various breeds of swine, the American farmer appears to be aware; hence the large importation of each sort into the new world, and Mr. Allen's tour will not, I presume, diminish the demand.

In breeding and training the horse, the English farmer has attained the highest possible standing. The English race horses and hunters, carriage horses, and cart horses, are the admiration of the whole world. The extent of the stock of English horses may be judged from the fact that one English dealer, (Mr. Elmore,) has engaged to supply the French government with 2500 cavalry horses in three months; and the quality from the circumstances that though the agreement is now nearly completed, our own stock is so far from being injured, absolutely relieved, (the horses sent, being those hybrids, between the hunter and the chapman, which are the breeders' "weeds;" ) and that even the horses rejected by the inspecting officer, are readily sold at a much higher price than the government gives. (Vid. Nimrod's Foreign Sporting New-Monthly Mag. No. 250, page 250.)

The pure bred animals of each class are kept at home at superior prices: The race horse varying in price from hundreds to thousands; the hunter from £50 to £200; the carriage horse from £30 to £100, and the cart horse from 5*l.* to 40*l.*

Of the permanent improvement in the soils of England, which have been made within the last century, but light mention can be made here. Amongst the most important of the means used, are draining, subsoil ploughing, irrigation and warping. Draining, irrigation, and even subsoil ploughing were no doubt known in the olden time; their extensive adoption, however, as a means of fertilizing the soil, is a modern improvement. Thus though English farmers have known for ages how to convey water from one place to another by a drain, we do not find that it was ever employed to thoroughly alter the constitution and general temperature of soil. It was not, then, till the general reactions in the spirit of agriculture took place, till Tull, by fanning the spark into a sudden flame, set others to think as well as himself, and till Bakewell had applied the principle to breeding, that it began to be understood fully. The labors of Dr. Anderson and Mr. Elkington, (1761) showed at once that it was an agent which if properly used would be of an immense benefit, and how it should be used. Since that time it has assumed the shape of progressive system dependent on scientific principles, and as such has improved in its practical details and in its results.

The advantageous effect of draining upon heavy soils must be just as great as the injurious effect of too much water. What these evil effects are, Professor Johnston in his Lectures at the Durham University, has shewn; and Dr. Madden, in an elaborate paper in the "Quarterly Journal of Agriculture," for this month, (Decr. 1841,) shows most beautifully the mechanical as well as the chemical action by which too much moisture injures the vegetative

process. To quote from either of these authorities in this hasty sketch, is not in our power.

The good effects of irrigation and warping; both merely systems of applying weak liquid manure in immense quantities, and of the subsoil plough as an instrument by which the water is permitted to diffuse itself more generally through, and the atmosphere to act upon the tenacious subsoil, so as to make a change as it were in the general character of the component parts of the soil, may also be philosophically demonstrated. But it is in each case unnecessary. We have the proof positive in millions of acres. Thus the fens of Lincolnshire, Huntingdonshire, and Cambridgeshire, which 50 years ago were stagnant marshes, and are now luxuriant pastures.\* Chat Moss (Lancashire,) in 1820, a yawning morass, and now a golden cornfield, studded with incipient villas, and the statements of Mr. Denison of Kilnwick Percy, (Transactions of the Yorkshire Agricultural Society,) of the Rev. Mr. Craft, (Journal of the Royal Agricultural Society, vol. 2, p. 32,) of Sir Jas. Graham, (Journal of the Royal English Agricultural Society, vol. 1, p. 32,) and of the author of the British Husbandry, (vide Pamphlet on land draining, &c.) exhibiting as they do a change from comparative sterility to fertility, from a nominal to a fair rent, are practical evidences of the value of the permanent improvements produced by draining, warping, irrigation, and subsoil ploughing. They are evidences too, which, while they profess to record what the system has done for individuals, are really illustrations of what it is doing for all.

Such, then, is a brief sketch of the advance made in the several departments of English agriculture, up to the present period. Of the whole progress, the one county of Lincoln is a lucid epitome. Divided into three natural portions, the fens, the heaths, and the wolds, the former of which, fifty years ago, was an unprofitable marsh, and the latter barren sheep walks or miserable outlands; yet now, by the aid of draining, 200,000 acres of the fens are luxuriant pastures, which bear a heavy stock of as fine cattle as can be met with in England; while the wolds, and the heaths, by the adoption of the turnip and clover culture, and the use of bones and rape dust, send to the market countless flocks of sheep, and as fine samples of wheat as can be found any where.

Thus we learn from the evidence of Mr. R. J. Atkinson, Mr. Francis Isles, and Mr. John Houghton, (vide "Compendium of Evidence before Committee of House of Commons, 1837," ) that on the whole of the lands from *Louth to Barton*, where thirty or forty years ago wheat was scarcely known, and the land was, generally speaking, uncultivated, much improvement has been made, even within ten years; that 28 to 30 bushels of wheat is an average crop; that it is of a fine quality, and can compete in the markets with that grown on strong lands; also, that when clay land has been drained, in some districts, it will bear green crops.

\*200,000 acres of the Lincolnshire fens have been reclaimed. In other countries many acres have been similarly reclaimed. 25,000 acres of Deeping fen are drained by two steam engines of 60 and 80 horse power.

To be Continued.

For the American Farmer.

Mr. Editor—In your highly esteemed paper of the 29th ultimo, I observe a paper by T. C. Ryall, copied from the Tennessee Agriculturist; in which he attempts to invalidate my evidence and reasoning on the character and habits of the *Cut Worm*. He complains that my "experiment was with an isolated individual," which has led me into error. It is true that my experiment was a single one, and that I might have caught a straggler, who lagged behind the march of his species. My object was first to learn the *natural history* of the insect, then to describe his habits and point out a remedy for its destructive propensities.

These were considered a desiderata in entomology; for although the character and habits of the insect might have been described fifty times before, I had never seen the description. The "American Farmer," "Farmer and Gardener," and other agricultural works were in vain searched for the object of my inquiry. Works on entomology were brought into requisition; but they gave no satisfactory description of this particular species of moth. As to the generic term *phalera*—moth—it has been sufficiently elucidated: but the species being extremely numerous, this one so far as my investigation has reached, has been overlooked.



Now as Mr. Ryall and myself chance to be labouring in the same field, with a like object, the good of our fellow men, I hail him as a coadjutor in the cause of entomological research, and as one striving to advance the cause of agricultural science.

My conclusions were drawn from an "isolated experiment," and may have been "false;" but were not *therefore* so. Has Mr. Ryall made one experiment to test the accuracy of his conclusions? If he have, let us have the details of that experiment. If he have not, then I turn his own reasoning upon himself, and say his conclusions having been drawn without *any* premises, his fabric is baseless.

Although I might avail myself of the inconclusiveness of Mr. Ryall's reasoning and deductions, yet I should esteem it a poor victory obtained at the sacrifice of truth. Honest, unsophisticated truth has long been the object of all my inquiries, and I shall feel myself under lasting obligations to Mr. Ryall, or any other one, who will cast such light on this obscure subject, as shall render it plain and tangible, and place it within the power of the agriculturist to controul its influences. I have not the paper at hand which I published some time since on the cut worm, (it being placed with the other part of the volume in the hands of the binder) but if my memory serves me correctly more stress was laid on a *change in the rotation of crops* than on a summer fallow. I could not consistently with the principles laid down in my prize essay, published in the American Farmer of Feb. 10th, 1841, unequivocally have recommended a practice so fraught with mischief to the soil, except from imperious necessity, and when the probable good would be likely to overbalance the positive evil.

Mr. Ryall, it appears had, unknown to me, recommended the practice of fall or winter plowing for the destruction of the cut worm; and my theory happened to come in collision with his practice; this has brought him out upon me in the essay now under consideration. His sensitiveness on this subject reminds me of an anecdote I have somewhere seen, of an individual who had obtained a patent for a machine to *imitate thunder*. He happened to be at a theatre where in the course of the play a storm was raised, and hearing the *mock thunder*, exclaimed, "Sdeath, that is my thunder."

Now Mr. Ryall seems to appropriate to himself the invention of fall or winter ploughing, not only for the destruction of the cut worm, but for the *pulverization* of the soil; and seems disposed for a tilting match with all those unwitting wights who may chance to differ from him in opinion.

Here again he complains of the *solitary* case cited; and says it *might* not have been ploughed sufficiently deep, and the winter *might* have been unusually open, &c. Fie, fie, Mr. Ryall, this is not reasoning—I could retort, and say it *might* have been deep, and the winter *might* have been severe, &c. 'Tis strange how fond we are of riding hobbies! Now there remains not a doubt on my mind that the very means used by Mr. Ryall for the destruction of the cut worm was the very cause of increasing it two-fold. As far as my observation serves, the cut worm does not bury itself half the usual depth that we plow. It hibernates near the surface among the vegetable parts of the soil, among the roots, &c. of the plant upon which it has been accustomed to feed. Deep Fall ploughing does not destroy it; but places it more secure from frost.

Had it been necessary, I could have cited a dozen instances in which the expectations of the husbandman have been disappointed by this "pernicious" practice; the one referred to was by an intelligent and scientific as well as practical farmer; and one would suppose on a scale sufficiently extensive—over an hundred acres—to convince the most incredulous.

Well, let us examine Mr. Ryall's other reasons for fall or winter ploughing. The first is, that the stiff clayey soil may be pulverized by the effects of frost. Nothing can more clearly to my mind disclose the lack of scientific knowledge and correct reasoning than this; which has for a thousand and one times been repeated and as often refuted. Pulverization is not the great and primary object in preparing the ground for a crop—if it were, a dusty road would be the most likely place in which to plant in order to obtain a return. If pulverization or friability were the object, I do not believe that winter plowing would effect it; but that the spring rains would cause a clayey soil to run together like dough, and become waxy, or livery.

We have never heard of a farmer who manages his land on correct and scientific principles, complain of his soil being too stiff and compact. These complaints come from men who do not *LIME* their lands—who do not turn in crops of CLOVER—who do not supply the expenditure of vegetable matter by suitable returns in the shape of manure—who farm too much poor worn out land.

I would fain wish I could find *something* to approve in the production of Mr. Ryall; as it may appear captious and ill natured to differ from him in *all* his positions. Let him, however, be assured, that it gives me no pleasure thus to dissent from him in opinion. While I agree with him then as to the *practice* of turning in a clover lay deep for corn, and of not disturbing the sod in planting (this plan he will find recommended in my prize essay above alluded to) I must beg leave to differ from him entirely, as to the expected results. Let him rest assured that the worms will come to the surface every night to *take an airing*, no matter how deeply turned in by the plough; and that their habits are not to feed below the surface, but upon it. A much more likely way to prevent their ravages upon the corn, is to leave baulks in the middle of the rows, for the worms to feed on; but I do not recommend it. I would change the rotation and let corn follow wheat in the succession of crops.

In the article which Mr. Ryall has done me the honor to review and criticise, I think I mentioned the circumstance of having spread last fall about 20 bushels of lime to the acre on the field which I intended for corn this year, in the hope and expectation of its destroying, in some measure, the cut worm. I can now state, from experience and analogy, that it has been attended with most decided advantages and beneficial results. I have never had corn stand so well, nor look so thrifty on a clover sod, taking into consideration the backwardness of the season.

Permit me, in conclusion, to assure Mr. Ryall, that in my remarks on his paper I have been actuated by no unfriendly feeling; but on the contrary I regard him as one willing to advance the common cause of agricultural prosperity. It is by an honest interchange of opinions that we are to hope to elicit truth; and I have no doubt that by giving due weight to reason and experience we shall mutually agree on most subjects connected with the important science of agriculture.

W. L. HORTON.

Woodlawn, Harford Co. Md. July 2d, 1842.

#### REPLY TO PART OF DR. HORTON'S THEORY OF THE FORMATION OF THE EARTH—CROPS OF MISSOURI.

To the Editor of the American Farmer.

Sir—I deem it my duty to say a few words in reply to the communication of Dr. Wm. L. Horton, which appeared some time since in your columns, on the subject of the origin of the prairies of the West, as that article, if taken as correct, is calculated to mislead the public mind on that subject. The Dr. sets out upon the hypothesis, that the stratum of earthy matter deposited on the rocky formation in the region of the prairies, although sufficiently deep to produce good crops of the grains and grasses, is nevertheless too thin to support timber, which he supposes requires a much greater depth of soil. Now, so far from this hypothesis being true, it is highly probable that the converse of it is true, and it is highly probable that the immense depth of the earthy matter superincumbent on the rocky formation, together with its peculiar qualities, one of which is a strong affinity for water, has prevented the growth of timber on the prairies. The prairies of Indiana, Illinois and Missouri, occupy generally the upper level of these countries, and as a necessary consequence, must have a greater depth of soil or earthy matter deposited on the rocky formation. This high plain is not level, but undulating, and the earthy stratum is of various thicknesses according to these undulations, varying from, say, 15 to 90 or 100 feet, and averaging 30 or 40 feet in thickness. As soon as you begin to descend from this high plain, and approach nearer to the rocky formation, you meet with timber which grows abundantly and thriflily, even in the fissures of the rocks, where they cross out on the steep sides of the hills, and where there is scarcely any soil to be seen. It is true that prairies are not always confined to the upper level of the country, with a deep bed of clay interspersing between the surface soil and the rocky formation below; on the contrary, most if not all the prairies of Ohio occupy the low grounds of the water-courses, and are generally of a wet character. There is, also, a large amount of prairie on the low grounds of the Wabash and its tributaries,

most of which is subject to inundation, and much of it incorrigibly wet and swampy. Much of it is, however, dry and porous, and well adapted to general cultivation. We have also here, in Missouri, a considerable amount of alluvial prairie: much of the Mississippi bottom is prairie; a majority of which is growing on a close fine smooth cold whitish livery clay, such as is generally known as crawfish land. We have, however, some portions of fine porous warm prairie on that river; but the mass of the prairies of the west are situated on the deepest stratum of earthy formation that I have seen any where. The idea too, that the surface of this valley has undergone but little change since it was lifted from the bottom of the great deep, is altogether fallacious; for in digging wells here on the ridges in the prairie, we often meet with logs of wood, charcoal, and other substances that belong to the surface, at the depth of from 50 to 70 feet below the surface; but in some instances within my own knowledge, a vegetable mould of as good quality and equal in depth to the best specimens of the surface soil, have been found 70 feet below the surface, with the roots of large trees in it, just as they had grown there, in such a state of preservation that the kind of timber could be identified. I am not geologist enough to undertake to describe the earthy deposit (for deposit it certainly is) that intervenes between the present surface and the rocky formation below; but of one thing I feel certain, that it is principally alluvial, or at least deluvial; for in almost every portion of it are to be found pebbles, or rocky substances worn perfectly smooth by friction, consisting of very many varieties, none of which are to be found in the undisturbed rocky formations within at least 1000 miles of this place. It is a fact too, that almost every portion of this earthy deposit, when taken up and exposed to atmospheric influences for a short time, becomes capable of supporting a very luxuriant growth of vegetation. I saw myself last summer at the residence of a neighbor, a watermelon vine as luxuriant as any I saw last season, and which produced a good crop of excellent fruit, growing near the top of a bank some 5 feet high, that had been taken from a well that he had dug the preceding season. I have also, in many other instances, seen crops of different vegetables growing most luxuriantly, in what we call clay, taken from many feet below the surface.

The vast amount, and almost endless variety of minerals, found in this region, seem to indicate that it has been at some former period subjected to volcanic influences, as some of our eminent geologists attribute all mineral formations to volcanic origin; but on this subject I am too much of a novice to express any positive opinion.

Geologists who have visited the iron mountain of Washington county, in this state, which is a solid mass of nearly pure iron, 3 or 400 feet high, and I believe 5 or 6 miles in circumference, express the opinion very confidently, that it has been forced up from an unknown depth by volcanic agency.

All the crops we cultivate here, are tolerably fair; the season has, however, been too cool for corn for about a month past, generally, and its complexion is bad; but may yet make a good crop if the remainder of the season be propitious. But what will good crops avail us, as, when produced, we cannot sell them for as much as will pay for preparing them for, and taking them to market.

Yours, respectfully,

JOHN SMITH.

Dardenne, Mo. June 22d, 1842.

**Curious Arts.**—Some friend has sent us, through the post-office, the following useful recipes, which, if genuine, (and we see no reason to doubt,) are truly valuable, as well as curious. He has our thanks.

1. **A Water proof Glue.**—Melt common glue in the smallest possible quantity of water, and add by drops, linseed oil that has been rendered dry by having a small quantity of litharge boiled in it; the glue being briskly stirred when the oil is added.

2. Glue will resist water to a considerable extent by being dissolved in skimmed milk.

3. The addition of finely levigated chalk, to a solution of common glue in water, strengthens it, and renders it suitable for signs or other work that is exposed to the weather.

4. A glue, (or cement,) that will hold against air or water, may be made by mixing and boiling together linseed oil and quick-lime. This mixture must be reduced to the consistence of soft putty and then spread on tin plates and dried in the shade, where it will dry very hard. This may afterwards be melted like common glue, and must be used while hot.—*American Mechanic.*



We welcome our old friend and correspondent, *John Smith*, to our columns again, and thank him for the geological facts which he communicates with regard to the formation of parts of the Mississippi and Sciota valleys—facts which we are certain will be turned to good account by the gentleman whose communication invited their disclosure.

**The Convoluted Steam Boilers**—During a visit to the Maryland Penitentiary, a few days since, we had the gratification of seeing this excellent invention in full operation, and from personal observation can speak of its usefulness. It is competent with a comparatively small quantity of fuel to cook, in a short period of time, several hogheads, and this it does with less fuel than is required to boil an ordinary dinner pot. We omitted, in our admiration of its action, to ask the Warden the precise quantity of wood consumed daily by it, but judging from the smallness of the furnace, we have no hesitation in saying that it must be considerably less than is required to supply a fire place of medium dimensions. The apparatus and fixtures are simple in their construction, and involve no mystery as to the effects produced. From the disposition and arrangement of the safety valve, the position and size of the furnace, we should think that with but common care all danger from explosion may be obviated, if, indeed, any is to be apprehended. As to the boilers and their arrangement, they and it are plain enough to suit the taste of any, however wedded to simplicity he may be. The boilers consist of four substantial iron-bound hogheads of the capacity of about 150 gallons each, which are arranged on the kitchen floor abreast. Two of these are appropriated to boiling, and the other two to steaming. The steam is conveyed to the whole by means of convoluted metal pipes. The escape-gas is conveyed from the safety valve into the chimney by a metal conduit pipe also.

To give the reader an idea of the ease with which this machinery is managed we will state, that we found it in charge of three of the negro convicts, who appeared to be as much at home as though they had been engaged in boiling an ordinary pot.

Upon the whole we conceive it to be a truly valuable contrivance, happily adapted to the economy of time, fuel and money, and believe that in the cooking of food for stock that it will be found both convenient and promotive of the interest and convenience of the planter or farmer, as well as in the comfort and condition of his stock.

Having said thus much of its cooking department, we feel constrained by a sense of justice to remark, that the entire police arrangements and industrial economy of the institution appeared to us to be conducted with admirable skill, and to reflect much credit upon Mr. *A. I. W. Jackson*, its indefatigable and intelligent Warden, to whose politeness and attention while there we feel gratefully indebted. In every department through which he conducted us,—and he carried us through all,—from the kitchen to the parlor, from the avenues leading to the workshops, where the wretched victims of passion were, in part, atoning for their misdeeds by daily toil and confinement, to the dormitories where, after the labors of the day, they seek, in the oblivion of sleep, temporary solace from the visitings of their own self-reproving consciences—and from the refectory, where they daily appease the cravings of hunger, with "what appetite they may," to the chapel, where, on each returning Sunday, they listen to the Minister of God, as he invokes them to an examination of their hearts, and endeavors by his own example, to incite them to commune with Him, who alone possesses the power to chasten and forgive—we say that in each and all of these departments, we saw the unerring evidences

that order, cleanliness, care-taking and vigilance, were the presiding deities, and felt certain, that if the objects of its founders had not been realised, or public expectations fulfilled, that the cause of those disappointments were not to be found in the manner in which its affairs were administered, but in defects incident to the system itself.

**Heavy Fleeces**—The following letter will prove of interest to our agricultural readers, as it shows that a cross between the Bakewell and grade Merinos, does not, at least, decrease the weight of fleece, whatever may be its effect upon the quality of the wool; but we should presume that that would be improved, in proportion to the quantity of Merino blood existing in the ewe upon which the cross might be made, and as those in the present instance were half bred, that the fineness of the wool would be advanced in a proportionate ratio, and that, by possibility, the staple may have been shortened to the same extent. In all such accounts as the one below, it is desirable that the representations of effects produced by such crosses, should be full upon all points of moment to the farmer, as the value of crosses are then the more readily appreciated.

*Montevideo, Montgomery Co. Md. June 29, 1842.*

Dear Sir: I send you a statement of the fleeces of eight sheep, six wethers and two rams, the only sheep of that description on my farm. After the belly wool was removed and they completely tagged, they furnished the following:

13½	9½
13½	9½
11½	11½
10½	10½

Total, 89½ lbs.—They were a cross of a Bakewell ram obtained through Mr. Lee, of Virginia, of Mr. Dunn, of New York, upon half bred Merino ewes.

Yours, respectfully,

JOHN P. C. PETER.

Correspondents have enquired of us the price of genuine Saxon rams, and also of the Broad-tailed Sheep; any one having such to dispose of, will oblige us by stating the price thereof, deliverable in this city.

**Monetary Affairs in Missouri**—An old and respected friend and correspondent, in writing to us upon business, gives a most gloomy account of the monetary affairs of Missouri. This we regret the more, because, looking at things as they are, and reasoning from the present to the future, we cannot discover in the prospective even the slightest glimpses of speedy change for the better. Missouri, with all her mineral wealth and eminent adaptation to the purposes of agriculture—with all her advantages of location, soil and climate—with all the freshness of youth, and the irrepressible buoyancy and enterprize of her citizens, like her older sisters, will have to abide the issue of those immutable laws which regulate the affairs of men, and await, in patience, the slow progress of those influences, and the operation of those principles, which alone are competent to bring about a healthful reaction in the business and pursuits of her community. In animal economy it is a received axiom, that like will produce like, and so it is equally true, that material causes will produce corresponding effects, and though we may, by temporary expedients, suspend those effects for a time, still there is no security for lasting relief, but in a radical removal of the causes which have produced the disastrous results. What those causes are, it is not our object here to point out and discuss; but of one thing we are certain—be they what they may, they are universal, extend throughout the limits of our entire country, and reach alike every interest of society. To us, therefore, it appears evident, that in the treatment of a disease so diffusive, so prostrating to all the energies and enterprises of life, it would be fallacious to attempt its cure by temporizing appliances, as nothing but the boldest practice, and most vigorous and drastic medicines, can reach the seat, much less remove the cause, of a malady so deep rooted and

chronic as it has now become. A fever, in its incipient stage, may be arrested in its ravages, and the system be restored to health, by an exhibition of some of the simplest remedial means known to the science of medicine, or even, an intermission of a meal or two may be sufficient for the purpose, but let that same fever prey on unresisted for a time, and the most decided, active and skillful management may prove unavailing; and, as a necessary consequence, the patient falls a victim to it. Now, as the disease under which the prosperity of our country labors, has relapsed into the chronic form, does it not become all who have any pretensions to knowledge in the art-curative, to come forward with resolute minds and pure hearts, and do all that in them lie to afford the requisite relief, without regard to selfish or individual interests. Each should place himself upon the broad platform of patriotism, forgetful of self, and devoted alone to the one great object—the promotion of our country's welfare.

**Crops in Harford county, Md.**—An esteemed friend in Harford county, of this state, writes us, under date of 4th July, as follows:

"Having lately taken an excursion through our county of some 20 miles in extent, I am enabled to give you the result of my own observations, as well as the opinion of farmers with whom I have conversed. The prospect for an abundant crop of wheat was never fairer than was ours till within a few weeks past. The aspect has been changed. Eight or ten days of close, cloudy weather, with some rain and foggy mornings, just at a critical period, has entirely changed the appearance. Rust in some instances and scab (blight) in many will cause the wheat crop to fall somewhat below a fair average; yet on the whole tolerable. Some gentlemen, farmers, with whom I conversed yesterday, say there will not be more than half a crop. I think they will be mistaken. As to my own, I have no reason to complain, but think I shall make, at least, 20 bushels to the acre.

"Corn is uniformly low for the season of the year and generally looks bad. Having taken unusual pains with my own, I am not displeased with its appearance, and calculate on a remunerating crop. If I were to express an opinion from present prospects, on the corn crop, it will fall greatly short of an average yield."

From all that we can gather, we have reason to conclude, that the lower parts of Maryland and Virginia have suffered more than any other districts, by the rust; and we have very unfavorable tidings from our friends on the Eastern Shore, many of whom will not secure half an average crop. We regret also to learn that the worm has done much damage to the Corn in Northampton and other counties of Virginia; a friend of ours has replanted nearly his entire crop, the worm having destroyed his first planting after it had attained a considerable size.

A letter from Montgomery co. Md. informs us that the harvest is turning out very abundant; and our advices from Frederick, Washington and Alleghany, are to the same effect.

We have before intimated that it should be the policy of our farmers to have their produce in market early—and to show the competition they have to contend with, we refer them to the article on another page, on the vastness of the crop of wheat in the West the present season, a large portion of which will reach the Atlantic markets, by means of our internal communications.

**Tall and prolific Oats**—We had a bundle of oats left at our office a few days since, which was grown on the estate of Jas. Howard, esq. near Hampton, Baltimore co. They are of the variety called the Potato oats; the stalks are 7 feet high, nearly as thick as our little finger, and the heads both long and well filled, a thing not usual where such great height is attained. It is difficult to compute products by small samples, but if the one in question be a fair specimen of the field, we should think it ought to yield 50 bushels to the acre, unless there was a stinting



of seed in the sowing, the which we do not apprehend to have been the case with a gentleman of Mr. Howard's intelligence.

#### A VISIT TO CLAIRMOUNT NURSERY.

We spent the greater part of a day recently at the extensive Nursery of our old friend Sinclair, at Clairmont, situated about three miles from Baltimore, in a north easterly direction. This establishment was projected and established many years since by its present proprietor, and is well known in the South and Southwest, having annually, for a series of years, filled orders from these quarters for fruit and ornamental trees and shrubbery in every variety. It may, therefore, be unnecessary for us to speak of the reputation of its proprietor, as that is already too well established to require the expression of our opinion.

The entire farm of Mr. Sinclair comprises 188 acres, forty of which are appropriated to the purposes of the nursery, which embodies within its limits the growth of almost every variety of trees, fruit and ornamental, as well as shrubs, that can well be required to gratify the appetite or please the fancy. And it is but meting out sheer justice to say, that we have never looked upon any spot where the growth appeared more healthy and vigorous, or where more pains had been taken in the extirpation of grass and weeds. Every thing was in the best possible growing condition and clean as a penny. There may be larger establishments in the country, but if there be, they are unknown to us; but be that as it may, we should presume that Clairmont can supply any reasonable amount of orders, come whither and when they may.

Among the fruits we noticed some ninety or a hundred different varieties of apples; of these there were, we think, fifteen new varieties but recently introduced into the country, one of which, of Russian origin, that has the reputation of bearing a fruit weighing 17 oz.

The varieties of Pears exceed sixty in number, and comprise the most choice selections, both of old and new: of these about twenty varieties are of recent importation, and most of them from the nursery of Professor Van Mons, a name as well known as dear to the votaries of Pomona.

Of Plums, the collection though not numerous, is select, embraces upwards of 20 of the best sorts, and of each of these a full supply.

The Cherries, number upwards of thirty different sorts, embracing the choicest varieties, and among them ten new kinds recently imported.

Of Apricots, there are ten varieties, five of which ripen in July and five in August.

Of Nectarines, there are also ten different kinds, and like the Apricots, as we learn, were selected for their excellence.

Of Peaches, the varieties number about fifty: of these fifteen are of recent importation from England, and said to be choice fruit.

Besides these, he has full supplies of Almonds, Mulberries, Quinces, Currants, Figs, Raspberries, Gooseberries, Walnuts, Chesnuts, Filberts, Hazlenuts, Strawberries, Wortleberries, Cranberries, Grapes, ornamental trees of all sorts and sizes, hardy ornamental shrubs, ornamental evergreens, vines and creepers, honeysuckles of every hue, from the monthly to the evergreen, and Roses in great variety, besides numerous green house plants. In a word, the collections in every department of the nursery are extensive and rare, embracing almost every thing that could either gratify the palate of the gormand, or delight the eye of the man of refinement.

We noticed many trees as we walked through the nursery of singularly beautiful foliage, both among the deciduous and evergreen families. The silver leaved Maple, as its glossy and metal like leaves yielded to the

breeze, showed to great advantage, and presented, at the distance from which we viewed it, more the effect of a luxuriant bloom of flowers than any thing else to which we can compare it. The Copper leaved Beech, though not to be compared with the former, is attractive from the bronze like complexion of its leaves: the *Alanthus* too, with its long and pinnated foliage, is also attractive, and cannot fail to become a popular tree. Of Magnolias we noticed five different varieties, and amongst them the Grandiflora and Microphylla, sorts so much esteemed. The Balsam fir, American and Scotch larch, Arbor Vitæ and several pines, elicited our notice as much by their various tints of green, as the peculiar denseness of their foliage. But we saw nothing there that rivetted our attention more than the *Weeping Ash* with its long pendulous limbs. Through the limbs of one of these, which stood out, solitary and alone, to challenge admiration, a grape vine had been so fixed as to form a circle, over which, with almost tapestried elegance, the branches fall, reaching near the earth, and forming a natural arbor, infinitely more sightly than any which could have been elaborated by the art of man. The Buffalo Berry, the flowering Acacias, six varieties of Willow, the Tulip tree, American and exotic Ash, and Juniper, each possess their claims to favor. We do not pretend to give a minute account of the hundredth part of what is to be seen on the 40 acres comprising the Clairmont Nursery; were we to attempt only a bird's eye view we could fill a volume. All we desire to do, is to name a few of those which interested us most as we moved along. But while we are making this enumeration, we must not forget to name the *Fringe or Smoke tree*, which for its picturesque appearance should grace the lawn of every homestead.

The collection of Grapevines are extensive, and among them we were shown one which was brought from the Red River—it was in fruit, which looked well.

The stock of Dahlias are large, and upon the whole comprise one of the most splendid collections we have ever seen. Besides the Nursery business, Mr. Sinclair has many acres devoted to agricultural purposes, and several occupied in growing seeds for the establishment of his son in town. This department is also well attended to, and reflected credit upon the head that projected, as well as the hands who did the work.

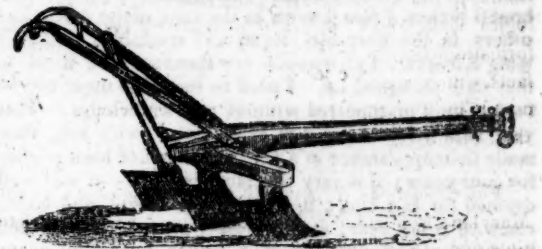
Independent of the grounds occupied by the Nursery, in farming, and in seed raising, Mr. Sinclair has several acres on which are growing his standard fruit trees, from which he procures his grafts, and buds, and thus keeps up a continuous and reliable supply for his nursery. Connected with the enclosures of these grounds there are two beautiful young hedges of Virginia thorn, which for denseness of body, thrift and luxuriance, are equal to any we have ever seen. There are but few places in the oldest, which is now about five years old, through which a chicken could penetrate.

Mr. S. is engaged in feeding Silk-worms, and will, when done, have fed five hatchings the present season. His luck has been good, the worms healthy, and he will be well rewarded. We shall recur to this subject again.

**Foreign Intelligence**—The steamer Caledonia has arrived at Boston, with Liverpool dates to the 19th ultimo. The news is unimportant and devoid of interest. The distress in many of the agricultural and manufacturing portions of Great Britain remains unabated, and in fact the accounts appear even worse than at any former period—Cotton has declined about 1-8d for lower qualities; flour and wheat were very dull.

**To prepare a Round of Fresh Beef for Boiling.**—Put the Beef in a dish of sufficient size, and add water enough to cover the lower part of the meat. Then put a quantity of salt on the top. In a few hours it becomes well seasoned, and, when thoroughly boiled, makes a most palatable dish.—N. Y. Agriculturist.

PATENT SEED AND CORN PLOUGH.



The above cut represents the patent Seed and Corn Plough so favorably noticed by Dr. Jos. E. Mose, in our paper of 29th of last June. As will be seen, it is a three furrow plough, each one cuts five inches, and so constructed as to turn the earth handsomely over, and in the most suitable manner for cultivating corn or seeding wheat. The mould board and land piece are attached to a permanent cast iron standard secured by bolts, in the centre of each and being shaped exactly alike at bottom and top, allows them to be reversed when the bottom of the mould board (which also acts as the cutting edge or instead of a share) or land piece become dull or worn out. The draft of this plough is not greater than ordinary corn ploughs, and lighter than the common corn cultivator. One small horse (as Dr. Mose remarks) is capable of drawing it without difficulty.

Thus one man and a horse will do as much work as three men and three horses in the common way, leave the work in better order, and at an immense saving of time and money. These ploughs are also made with the mould board and share separate; the plan adopted however is more simple and the mould board or cutting plate being very light can be sold at 37½ cts. each, which is but a trifle above the price of ordinary plough shares, and being double edged will last twice as long.

These ploughs are made in this city by Messrs. Sinclair & Co. and are sold at \$8 each.

#### THE PALMA WORM.

To the Editor of the American Farmer.

Dear Sir—As it is now pouring down from the Heavens as though it had not rained for these six weeks, and has been raining for 14 days, I have thought I would take up my pen and give you a sketch of my misfortunes in farming these two years. The last year about the 8th of June, the worm commenced cutting, or rather eating up my corn, and in a few days notwithstanding the perfect stand I had, they had nearly cleared a field of 200 acres, a large proportion of which had received the cultivator, and the hoe had followed over about 75 acres of it—it was beautiful. They would leave spots about in the field, varying in their size with the richness of the spot and highness of the land, the land being thin for low land, for it is immediately on the bay of the Chesapeake; and it was land too, which had been alternately cultivated for seven years, without perhaps one year's rest, and scarcely any improvement whatever put on it. This I mention to elicit information, as you will hereafter see.

I finally after planting the land entirely over, all to say about 30 acres, three times, which last planting was on the 30th June, succeeded in getting a stand, and but for a very early and severe frost I should have made a wonderful crop of corn for the chance. The worm disappeared last year about the 26th of June; their numbers were almost incredible, and they were said by the old people of the neighborhood to be the worm called *Palma*—they were at first very small, darkish brown, grew very fast, and when grown, some were near 2 inches in length, or certainly 1½, and their heads were like a black horn—their excrement through the field, especially on headlands, or as some call them, *bauktrows*, was almost as thick as mulberries under a tree—at least your foot would cover half a dozen sometimes in walking. Upon examination, I found that when they attained their full size, they would for a few days seem sluggish, and not move about much, and presently I discovered (for it was a great drought) that in the bottoms of the ditches, which had been cleaned out for the purpose partly of stopping their headway to other cuts of land that had remained unmolested, there



was a number of holes like nail holes, or gimblet holes, I made my ditchers try their spades, and as low down as about 6 inches, I found some in the state of the worm and others in the chrysalis form, and resembled a bug or wing'd insect. I afterwards saw thousands of them in that state ploughed up. I tried to see what they turned to, but they disappeared without my knowledge. This year I am sorry to say it is even worse with me; they made their appearance in a field that has not been in corn for four years; it is very fine land, but low—it was well drained for low land; it has been in clover, and wheat came off it last year; it was closely grazed by near 200 head of stock of all kinds, and finally it was from the moderateness of last winter, a perfect turf of blue grass and common yard grass. During last fall every weed that made its appearance after wheat (and there were a number of what we call red weed) I started my scythesmen, cut them close, and laid them in the water furrows before turning in my stock, thinking that they might tend to increase the worm. This spring (for I followed the plan laid down by Judge Buel) I planted very late a deep fallow, replanted, harrowed powerfully, and it was perfectly mellow. I sent to Baltimore for saltpetre to soak my corn in, then I tarred and rolled it in quick lime; every hill came up on a field that I know would be good for six hundred barrels; and the result is, to-day I have not corn enough, although I have collected and set every hill to itself, to make more than one hundred barrels a good year, even had it have come up where it now stands.

The same worm this year begun its depredations the 25th May; my corn was planted from the 29th April to 20th May; they have disappeared, or rather I think were driven from the face of the earth by a flood of rain which has lasted even until now. I shall plant my land when it gets dry, even if it is in July, which it certainly will be. I should like to get a rare ripe corn that would mature in a short time, say from 70 to 90 days.

My prospect for wheat and oats were at one time very fine, but I have given up all hopes of all my wheat—at least, it is much injured by wet, except my fly-proof; I intend to save all I make of that.

Nothing I believe will destroy the worm but severe freezing and winter ploughing. I am opposed to winter ploughing, believing that it kills land, but I shall try.

Believe me, I am, very respectfully,

Your friend and subscriber,

JOHN H. HARDING.

Clover Dale, Northampton Co. Va. June 29, 1842.

#### SALT AND GRUB WORM.

Mr. Editor.—Through the columns of your valuable paper, I hope to make the public acquainted with the value of the common black grub, as an agent in the cultivation of corn, when their labors are directed by the genius of man. This, sir, is a new position, a position which has for its foundation that there has nothing been made in vain, but that all things were made for the benefit and service of man and subject to his direction, and that it is only the ignorance of man that worms and insects become a scourge upon the face of the earth. The grub has been literally cursed for following the instinct of his nature, which teaches him to eat the corn and reject the grass and sorrel, with which our fields are generally filled.—Now, sir, if those who have cursed the grub and have advised the agriculturist to follow him with a sharp piece of tin or a knife, with which to decapitate him, or to tie him up in a rag and let him float down stream, had but applied common salt to the hills of corn in the place of gypsum, then, throughout the land, the merits of the grub would have been duly appreciated, then he would have destroyed the grass and sorrel in place of the corn,—thus materially aiding the agriculturist.

In my humble opinion, the introduction of salt as a manure, and to prevent the ravages of the grub, will be of incalculable benefit to the country. Upon our farm we have used salt as a manure and as a protection to the corn from the grub, for a period of seven or eight years. We ought to be capable of judging of the benefits which we have received from using it. During this period we have missed the application but one season—the result was the loss of our crop from a field of about twenty acres; we harvested but one cart load of corn, where, had not the grub injured it, we should in all probability have harvested fifty bushels to the acre. Last season, 1841, we planted about twenty acres; the grubs were so plenty that we despaired of saving it from them: indeed, upon an average, I

should think there was twenty to every hill of corn. We applied one bushel of salt to the acre; the protection was ample, scarce a single blade was touched, but every spear of grass and sorrel was destroyed by them, and in this way they assisted in the cultivation. The application should be made as the corn is just peeping out of the ground. The salt should be put exactly upon the hills, and at the rate of one bushel to the acre would do no harm, provided it is put on with common judgement. One bushel is sufficient if properly applied.

If you think this communication will be of any benefit to agriculture, you will please publish it and oblige a constant reader of your valuable paper.

THOMAS N. ALLEN.

Salt Point, Dutchess Co., 1842.

There is some wit in the foregoing, and we believe as much truth as wit. We know a farmer in whose statements we place entire reliance, who has been accustomed for years to put a quantity of salt and mix it well with his manure, which he intended to put in the hill at planting. It has happened repeatedly in these cases that his own corn has been uninjured by the grub, while his neighbor's just over the fence has suffered severely. He is confident of its efficacy. The application of salt to the hill, as described by our correspondent, is a new mode. *Ed.*

[Genesee Farmer.]

From the Cincinnati Chronicle, June 29.

#### WHEAT CROP OF OHIO—SURPLUS PRODUCT—PRICE—EXPORTATION.

The region of country north of the Ohio, and west of the Alleghanies, including western New York, a portion of Pennsylvania, and extending to Missouri and Iowa beyond the Mississippi, was long since foreseen to be the proper site of wheat culture in the United States. The parallel of latitude in which it lies, as well as the great upland plains, so fertile in soil, and so easy of cultivation, mark it as the grain-growing section of North America, the Granary whence, as from Egypt and Syria of old, the surrounding millions are to derive their bread, while engaged in other pursuits. Not one third of the United States in surface, and of very recent settlement, this section produced in the year 1839 half the Wheat grown in the U. States. The single state of Ohio produced more wheat than sixteen States, viz: Maine, N. Hampshire, Vermont, Massachusetts, Connecticut, R. Island, New Jersey, Delaware, S. Carolina, Georgia, Alabama, Mississippi, Louisiana, Arkansas, Kentucky and Tennessee. Such is the extent and importance, compared with other sections of the Union to which the wheat crop of Ohio has already risen. Where so much is produced, there must necessarily be a large surplus.—Accordingly we find that of sixteen million five hundred thousand bushels raised in 1836, at least seven million five hundred thousand, were exported. This will appear from the export returns of the ports of Cleveland, Milan, Sandusky, Cincinnati, and some smaller points. This fact is very accurately ascertained, and shows us also that the wheat consumed in Ohio, (independent of other grains which are largely used) amounts to just about six bushels to each soul. It is now certain that the wheat crop of 1842 is one of the largest ever known. The data upon which to calculate it are these; the increase of population, the stimulus to its cultivation by the comparative high price of 1841-2, and the unusual heaviness of crop. Upon these data the wheat crop of Ohio in 1842 has been estimated by different persons, at least as high as twenty five millions of bushels. This was our own estimate a few weeks since. There is now reason to believe the actual crop will be above rather than under the estimate.

The surplus crop of 1842 may be easily calculated. The State of Ohio has for twenty years increased in population at a steady ratio equal to 6 per cent. on the last year's population, and consequently the population of Ohio in 1842 is 1,700,000. This number at six bushels each gives us 10,200,000 bushels as the consumption of 1842. Deducting this from the crop, you have fourteen millions eight hundred thousand bushels surplus wheat in Ohio for this year. This is more than the whole crop of any other state in the Union in any former year.

The value of this surplus depends wholly on the price, and that is diminished as the supply of the article in market is increased. It is also diminished as the supply of money to buy it is diminished. Both these circumstances will this year act strongly against the price in the United States. Both may be varied by the state of the foreign market, but never in so great a degree, as by that of domestic consumption, which is far greater in amount.

The price of Wheat varies in Ohio very much in different sections. It is always higher on the Lake shore, than on the Ohio river; because so much nearer the great markets of Canada and New York. More than two thousand barrels of flour per day, pass into Montreal from the Lake shore. At Albany and New York, are the great distributing depots for the consumption of New England, amounting to scarcely less than two millions of barrels of flour per annum, brought into New England from the ports of the United States.

At Cincinnati Flour and Wheat are generally lower than at any point in the interior, or northern part of Ohio. At this point, we have some data for estimating the price of Wheat in the coming season.

In April, 1840, (crop of 1839,) wheat 45c.

In Nov. 1840, (crop of 1840,) " 53c.

In Nov. 1841, (crop of 1841,) " 95c.

These prices show conclusively that the crops of 1840 and 1841 were less than that of 1839; that of 1841 was really deficient. And in addition to this fact, the currency was during this whole period diminishing.

In 1842, then, we have to determine the price by the fact of a very large crop, and a very small amount of currency, compared also with the former prices. A miller informs us, that Wheat was delivered in Cincinnati, in 1834, at 40c. per bushel. Contrasts have recently been made to deliver it in Cincinnati, from the new crop, at 43½ cents per bushel. We infer then, that in the fall, Wheat will bring in Cincinnati 40 cents per bushel. In Northern Ohio, it will bring more,—but it can hardly be expected to average more than 45 cents to the farmer throughout Ohio. This is one-third less than the average of the crop of 1839,—in price.

We may now refer to anticipated exportation. In this, there are two aspects of consideration, one in respect to the State, and another for the nation. Here, the State, as we will see, has some advantage over the nation. The nation cannot force its surplus product, at any price, however low, on foreign nations, that do not need it, and who meet our flour in their ports with enormous duties. The flour may rot in the U. States, but cannot be forced upon other nations. The State, on the other hand having free communication by means of the great Lakes, the lines of canals, and our vast rivers, with every part of the U. States,—having also an immense supply at low prices,—has great facilities to dispose of her produce, and to attract purchasers. She will therefore, probably, sell, at some price, her whole crop. It is in this aspect, that we may look back with pleasure upon our great Internal Improvements, which, if they created a debt, will also give us the means of paying it; for it is absolutely certain, that in seasons of so great scarcity of money as the present, the flourishing interior counties of Ohio could not have cultivated wheat at all, without these facilities.

If the entire past experience of this country is worth any thing, it is certain that the export of American Flour does not depend upon the price at home; but upon the circumstances of the country to which it is to be exported. We have before us a table of the prices at Philadelphia, and the exported value of American Flour, for fifteen years, and in that it is an established fact, that the exported value of American Flour and grain, has been the greatest, when the domestic price has been the highest. Or, in other words, the lowness of price has not increased the exportation in a proportion equal to the diminution of that price.

We extract from the table, the results of the five years of highest price, and of the five years of lowest price, without reference to other circumstances.

Year.	Price.	Exported Value.
1796,	\$12.50	\$9,064,955
1817,	11.67	17,291,824
1795,	10.60	7,286,111
1801,	10.40	11,465,417
1838,	9.96	11,530,662

\$56,638,969

These are the years of the highest price of Flour, in the United States, without reference to the order of time, or the amount reduced, and the reader sees the price was very high. The following series are the years of lowest price:

Year.	Price.	Exported Value.
1820,	\$4.72	\$5,555,609
1821,	4.78	5,048,248
1826,	5.65	3,998,863
1830,	4.83	5,928,506
1834,	6.17	4,318,770

\$24,849,996



It is self-evident from inspection that low prices at home, have no effect whatever to increase foreign demand, and in respect to the value of our surplus crops, has in fact diminished it.

We are now speaking of low prices merely, without reference to the cause of that low price. So far, then, as it depends on the prices here, the farmer and the merchant need expect no relief from the value of the Surplus Crop to pay debts or meet exchange.—The foreign value of the Surplus Crop will not be increased by the abundant production, or low prices at home. Fifty years' experience has shown conclusively, that the surplus crop has produced least, when the price was least, without regard to the quantity of that surplus.

Unquestionably, the state of the foreign markets may vary the case entirely. But, has there any thing occurred in the state of the world greatly to increase the foreign demand? We confess there is nothing visible to us of that kind; but we shall consider in another article the prospects of the farmer and the country in that respect.

**Pickle Vinegar.**—A friend writes us, "a lady in Orange sent me a nice pot of pickles, last winter, the vinegar of which I think is particularly good, and as she has sent me the recipe, I hand it over to the readers of the Planter."

"Ten gallons water, one gallon whiskey, one gallon molasses, one pint yeast—put all together in a warm situation the first warm weather in June, and in six weeks it will be ready for use. Put a sheet of foolscap paper in the vessel."—*Southern Planter.*

Rye paste is more adhesive than any other paste, because that grain is very glutinous. It is much improved by adding a little pounded alum, while it is boiling. This makes it almost as strong as glue.—*Southern Planter.*

#### BALTIMORE MARKET.

**Hogs.**—The supply of Live Hogs is not large, but is fully equal to the demand. Holders are asking \$4.50 per 100 lbs. and the limited sales that are making are at that price.

**Cotton.**—We note sales of 130 bales Mississippi at 9½¢ all; of 60 bales Upland at 9¢; and of 30 bales inferior Upland at 7½¢ cents.

**Plaster.**—A sale of a cargo this week at \$2.75 per ton.

**Sugars.**—There were no auction sales this week. By private contract we note sales of 132 hhd. Porto Rico, quality fair to good, at \$5.50; 6 hhd. ditto \$6.50; 60 hhd. New Orleans at \$4.50; 50 hhd. ditto at \$4.75; 45 hhd. ditto at \$5. and 5 hhd. ditto at \$5.50.

**Tobacco.**—The demand for the better descriptions of Maryland Tobacco has been fair throughout the week until yesterday, and transactions to a considerable extent were made at prices fully supporting last week's quotations. The common sorts have been almost entirely neglected, and the few sales that have been made were at rather lower rates. We quote inferior and common Maryland at \$2.50; good middling fair to good \$4.50; good \$6.50; and fine \$8.12. The accounts from Europe, received on Thursday by the steamship at Boston, are quite discouraging for common Tobacco, and since the receipt of the news very few transactions have taken place. Ohio, the sales have been pretty large for good and fine parcels, but for inferior and common there is no demand. We quote common to middling \$3.50; good \$5.50; fine red and wrapper \$6.50; fine yellow \$7.50; and extra wrapper \$11.13.—The inspections of the week comprise 459 hhd. Maryland; and 562 hhd. Ohio—total 1021 hhd.

**Wool.**—We note a sale of Merino fleece wool in handsome order this week at 32¢. There is still a considerable stock of the last season's clip in market, and the demand for some time past has been very limited and the sales small.

**Cattle.**—There was a fair supply of Beef Cattle at the Scales this morning, and a decline of about 50 cents per 100 lbs. was experienced. The offerings amounted to 279 head, of which 243 were sold at prices ranging from \$3.50 for inferior, to \$5 per 100 lbs. for prime quality. Sales of Live Hogs at \$4.50 per 100 lbs.

**Flour.**—There is scarcely any Howard st. Flour in market for sale, and the demand is confined to the retail trade. The last sales from stores were at \$6 for good standard brands in small parcels. There are no receipts by wagon, and we are consequently unable to quote a fixed price.

There is no stock of City Mills Flour. The millers are asking \$6.

Sales of about 500 bbls. Susquehanna Flour at \$6, cash.

**Grain.**—A parcel of 300 bushels new Wheat, from the Eastern Shore of Maryland, in bad condition and of inferior quality, was sold to-day at \$1. A lot of Pennsylvania old red Wheat was sold at \$1.26, and another parcel at \$1.30. Wheats are wanted. A sale to-day of Md. white Corn at 55¢ 56 cents, and of yellow at 57¢. Md. Oats are worth about 32½¢.

**Provisions.**—There is but little doing and prices are as last

quoted viz. Mess Pork is held at \$7.50; No. 1 at \$6.50; \$5.75; Prime at \$5.50; \$6. Baltimore Mess Beef at \$9.50; No. 1 at \$6.50; and Prime at \$4.50; \$5.50. Bacon sells slowly at former prices, viz. Western assorted at 44¢; Hams at 54¢; Sides at 34¢; and Shoulders at 34¢. We quote No. 1 Western Lard in kegs at 7¢.

**At Mobile,** in the week ending on the 5th instant, but a very light business was done in Cotton, the receipts being only 187 bales, against 120 cleared, leaving a stock on hand of 3,916 bales—sales of the week amounted to about 600 bales of middling to fair and inferior to ordinary, at prices ranging from 7½¢ to 8¢ and 9½¢. The growing cotton crop, agreeably to report, gives great promise. Flour was selling at \$8.50; Corn 65¢; Oats 56¢.

**At New York,** on Saturday, Flour remains without change, with but few sales. No Wheat here. Northern Rye sold at 67¢. A parcel of Jersey was offered at 67¢; 2500 bushels Ohio Corn, north about, sold at 54¢ measure; 3500 bu. at 55¢ weight; Jersey 60¢. Canal Oats are worth 37¢. Cotton is quiet. Exchanges, including Certificates and Checks—Boston par at; Philadelphia par at; Baltimore 1-8; Washington 4-4; Richmond 2-3; Raleigh 3; Charleston 1-4; Augusta 1-4; Savannah 1-4; Mobile 3-3; New Orleans 2-5; Louisville 3; Cincinnati 5; Nashville 9-10; Michigan 2-5; Treasury Notes par to 1; Bills on London 7-7½; do France 5-37½.

**At Richmond,** July 7.—Cattle—For cattle on the hoof from \$5 to \$6 are the general prices. Mutton—There is great variation in the quality, indifferent sheep bring only from \$1.25 to \$1.50, while the finer qualities bring from that to \$3 per head. Corn 55¢, and very little coming to market. Wheat—A sale or two has been made at prices not transpired. The wet weather has interposed to prevent the bringing of wheat to market. Tobacco—We continue our quotations—2-3 for common lug; good refused and common leaf 4-4 to 5; middling leaf 4-4 to 5; good 5-5 to 6; fine leaf from 6 to 7; occasionally a fine manufactured hhd. sells from \$8 to 9.

**At New Orleans,** July 2.—Cotton—On the evening our last review was made up, two sales of considerable importance took place, at too late an hour to be included in our notice of that day's transactions—they were 1500 Louisiana at 65¢ and 900 do at 9¢. Since that time but little has been done, altogether for the three days 2900 bales. Prices are firm and an advance of 4¢ is fully established on middling and ordinary qualities. Sugar—In prices there is no change; we therefore continue to quote 2-5 as the extreme rates. Tobacco—We have again had rather a dull week in the tobacco market; the transactions that have come to our knowledge do not exceed 250 a 300 hhd.

**At Philadelphia,** July 9.—Flour and Meal.—The stock and receipts of Flour are very light, but the export demand being only moderate, prices are stationary at the slight decline noticed in the early part of the week; sales of about 3000 bbls. fresh ground Penn'a. Flour at \$5.56 and \$5.50 per bbl. the latter being the market price to-day. Grain—The receipts of all kinds have been very light this week, and will probably so continue until after harvest. Wheat is scarce, and the supply not equal to the demand; for middling good Penn'a. red is worth 125¢ per bushel. Corn is wanted, sales of a few thousand bushels Southern Penn'a. yellow at 59¢. Oats are scarce, and are worth 32¢ per bushel. Cattle—Beef Cattle—435 head offered for sale this week, sales from \$41 to \$54, 50 left over.

**Liverpool,** June 18.—Since the last steamer sailed (4th instant) our cotton market has been dull, heavy, particularly the last day or two, and the low and middling qualities have declined 1-8d. per lb. Fair continues to be quoted as before, and good and fine qualities remain steady from their comparative scarcity. The unfavorable change in the market is attributed in a great measure to the commercial accounts from India and China, received by the overland mail of the 5th instant, which continue of a very unfavorable and discouraging character as respects British exports and trade generally, in the East, and this has again thrown great gloom over the Manchester market, much more indeed than is felt in our town. The sales of cotton for the week ended 10th instant, amounted to 29,600 bales, and for that ended last evening they were only 20,890 bales.

Of the latter 4820 were Uplands, at 34¢; 7450 Orleans 3-7-8; 5140 Alabama and Mobile 4-5-1-8; and 160 Sea Island at 84¢ per lb. Of this, 5000 bales were bought by speculators and 2500 for export, showing that consumers have taken an unusually small quantity the past week, and if our market had been left to them, prices would not probably have been so well sustained. The import into Liverpool since the 1st of January now amounts to 757,000 bales against 640,000 to the same period last season; in the supply from the United States the increase is 93,000 bales. The stock in this port is estimated at about 908,000 bales, against 543,000 at same period last year, the stock of American is about 435,000, or just what it then was. The import the past fortnight has been very light, only about 10,000 bales, owing to unfavorable winds. The distress experienced by the laboring population throughout the manufacturing districts appears to have become more general and extreme, and excites increased uneasiness.

The duty on wheat is now 11s. per quarter, and on flour 6s. 8d. per bbl. and will shortly be 10s on the former and 6s. on the latter. On Indian Corn it remains at 10s per 480 pounds. The weather continues favorable for the growing crops of grain, with the prospect of an earlier harvest than usual, though from the unfavorable seeding time last autumn the crop of wheat it is thought will not prove as large as might otherwise be expected—perhaps not beyond an average crop.

The Corn markets dull and Flour is bond 27s 6da23s 6d, in very limited demand. Free Flour is retailing at about 35s.

The duty on Turpentine is finally fixed at the nominal rate, one penny per cwt. when not of greater value than nine shillings per cwt; and between the value of nine and fifteen shillings, the duty is to be one shilling—when above the value of fifteen shillings, five shillings is to be the duty—so that Spirit of Turpentine will be admitted at the latter rate. We quote raw Turpentine 6s 9da8s 9d, duty paid. The Tobacco market is dull.

#### POUDRETTE AS A TOP DRESSING FOR CORN, GRASS, &c.

Price Reduced 5¢ for three Barrels.

Poudrette prepared by the New York Poudrette Company, from Night Soil, and not from the "Peat" Meadows of "Lodi" on the Hackensack River. This company was the first to prepare Poudrette in this country and claim to understand its preparation as well as any others engaged in the business. The poudrette prepared by them has been extensively used, especially on Long Island and other parts of this state, in New Jersey, Connecticut, and Massachusetts. When applied at putting in the seed, it brings forward vegetation rapidly, and ensures an early maturity. It may also be applied to corn and potatoes with great benefit at the first and even at the second hoeing. Many fields of corn which promise but small returns, in June and July, might be brought forward, and matured with a fair yield, by the application of twelve or fifteen bushels, applied at the hoeing. Turnips, Rutabaga and Buckwheat, may be made to yield largely by its application. It will be found of great value when used for these purposes—see Report of Dr. Bowers, W. F. Blydenburgh and others. For Wheat also it has been found to ensure a good crop. When a part of the same field, manured with Bone, was winter killed, and shrunk, that dressed with poudrette produced well—see W. W. Mills' report, and for grass after wheat, its effects have been found very effectual in many instances—see Report of Mr. Hay and Mr. Colman.

A fair estimate of its comparative value, with stable and barnyard manure, is as one of the former to 13, 14 or 15 of the latter, according to circumstances. Some farmers estimate it even higher. There is ample time yet to obtain and apply it this season, for these purposes; and to induce its use extensively, this season, on corn at hoeing, and on turnips and buckwheat, and on wheat in the fall, in order to establish important facts, it will be sold, in any quantity, at the rate of 5¢ for three barrels, or 2¢ for one barrel, delivered any where in this city below 24th street, until 1st of September, and may be had immediately, in any quantity by applying personally, or by mail, post paid, to

D. K. MINOR, Agent,

118 Nassau st., N. Y.

75 Shares in the company, which entitle the holder to one hundred bushels of poudrette annually for 17 years, may now be had on applying as above. Present price \$110. They will advance.

N. B. I perceive that the "Lodi company" got up by Anthony Dey and Peter Barthelemy, assert in their advertisement, that they make Poudrette "more than fifty per cent better than any like article manufactured here," and give the result of several chemical analysis in proof of the assertion. It is possible that Monroe Edwards might have escaped conviction upon the testimony given in his favor, had there been no testimony collected and arranged by the Prosecution. Almost any cunning lawyer can make out a case to suit himself, when there is no one to watch him, and there is no doubt but that a person so disposed, could furnish a chemist with a preparation which would give very different results from an article not designated, for analysis. An analysis for the other party might produce very different results, but the "analysis" of a good practical farmer who has used it several years, is after all, the most satisfactory to farmers in general; and therefore I would refer those, who desire to learn its relative value as a manure, to either of the gentlemen whose names are annexed who have used from 200 to 3000 bushels each, prepared by this company. They will cheerfully give the desired information if applied to personally; or by letter post paid. I refer to, and desire enquiry to be made of Dr. Josiah Bowers, W. W. Mills, W. F. Blydenburgh of Smithtown, L. I. C. J. Smith, and J. L. Ireland, Fireplace, Nathaniel Conkling, Patchogue; John Wood, Brewster; H. Wood and John Weeks, Huntington; Valentine Hicks, Thomas Willis and John Titus, Jerico, L. I.; James Hay and H. Le Roy, Newbold, Westchester, N. Y. Israel Crane and Dodd and Craine, West Bloomfield, N. J. Robert White, Jr. and Edmond T. Williams, Shrewbury, N. J.; J. K. Townsend, New Haven, T. G. Mather, Middletown, Conn.; W. C. Chapin, Providence, R. I.

If "urate" is made from the most valuable part of the material, of course the poudrette must be less valuable than when made from the whole mass combined.

The "Lodi" Company purchase and transport the "night soil," 8 or 10 miles to their works, where they say, they have an abundance of "a peculiar kind of Peat of the very best quality for the purposes of the company." The New York Poudrette Company is paid for removing the night soil and has to purchase and transport several miles, the materials used in preparation; and I leave others to judge who is most likely to adulterate and make a poor article, those who purchase four parts in five, or those who purchase one part in five, and are paid for taking the four parts. Orders promptly executed—Present price 5¢ for three barrels, \$10, for six, and \$2, for one barrel delivered.

D. K. MINOR, Agent.

118 Nassau street.

July 18 6w



**THRESHING MACHINERY—Prices Reduced.**

R. SINCLAIR, jr. & CO. have determined to reduce the prices of their Threshing Machines, Horse Powers, &c. at the following rates, viz.

Machine No. 1, suitable for two light horses or four ponies, with fixtures complete, \$125  
Which includes Horse Power, Thrasher, Separator and Band.  
Machine No. 2, suitable for four large horses or 8 ponies, with fixtures complete as above, \$150

The above prices is a reduction of about 30 per cent. below last year's rates. Those machines are now fully introduced and tested and so well known that it is unnecessary to furnish certificates or say any thing in their praise—other than they are expressly guaranteed to thresh rapidly and perfectly clean, simply constructed and made of the most durable materials and best workmanship.

Also—Wheat Fans—Ploughs—and a general assortment of Agricultural Machinery, Tools and Seeds. AP jy 13

**MOTT'S AGRICULTURAL FURNACE.**

The subscriber respectfully informs his customers, and the public generally, that he has on hand, and intends constantly to keep a supply, of MOTT'S JUSTLY CELEBRATED AGRICULTURAL FURNACES, for cooking vegetables and grain for stock of all kinds. They vary in size from HALF a barrel to FOUR barrels, and are better adapted to the purpose for which they are intended than any other yet invented; obtained the premium of the American Institute, and have given satisfaction to every gentleman by whom they have been purchased. Col. C. N. BEMENT, the distinguished agriculturist near Albany, New York, who has had one in use for some time, in a letter to the editor of the Cultivator, says:

"The one I purchased last fall, I continued to use during the winter, and have found no reason to alter the opinion then expressed; but on the contrary, I am more confirmed, and do not hesitate, without qualification, to recommend it, with the late improvements, as superior to any thing, for the purpose intended, which I have ever used, or which has fallen under my observation."

"Mr. Mott has lately sent me one of the capacity of two barrels, containing the improvements, which consist in casting 'points of attachment' or gudgeons, on the rim or sides of the kettle, 'so that with a crane or level' it may be raised out of the casing and the contents emptied out, and to facilitate which, a loop or eye is cast on the bottom of the kettle so that it can be done without burning the fingers. The flange also, has been extended beyond the edge of the casing, so that if water boil over it will not run down the flues and put out the fire."

These furnaces and boilers are portable and may be set up in any out-house, being from their compactness and construction perfectly safe. The furnaces are made of cast iron and peculiarly calculated to economize fuel.

The following are the prices for one of the capacity of a half barrel

do	do	do	One barrel	\$12.50
do	do	do	One and a half	20.00
do	do	do	Two barrels	24.00
do	do	do	Three do	28.00
do	do	do	Four do	38.00
do	do	do	Four do	48.00

A. WILLIAMS, Corner of Light & Pratt St. Balt. Md.  
do 15 tf

**THE SUBSCRIBER,**

Who exhibited the Corn and Cob Crusher and Grinder at the Agricultural meeting, having rented the Wheelwright & Blacksmith shop with the water power attached in the village of Franklin, will continue to build his Corn and Cob Crushers and Grinders, and has so improved them that persons who have not got horse powers can use them by hand power with sufficient facility to supply the wants of small farms, and with one or two horse powers can do more work than any other machine for the same purpose that will require double the power, having made a new set of patterns, and put such improvements as suggested themselves for the benefit of the machine; the price is now \$40, which includes an extra set of grinders.

He is also prepared to build Stationary Horse Powers of the very best and simplest construction, in every respect best suited for farmers; in place of using cast iron wheels, he uses leather belts which the farmer can keep in repair himself. It is now well tested that belts are as well adapted to driving machinery as cast iron wheels. One of the grand features of this horse power is, there is one-third less of its own power expended in driving its own machinery, consequently there is one third more power left for the driving of any other kind of machinery.

He is also prepared to make or repair all kinds of Agricultural or other machinery at the shortest notice.

Having got the blacksmith shop in complete order, he is prepared to do horse-shoeing in the neatest and strongest manner; likewise Smith-work in general, all of which he warrants to be good.

Orders for any of the above machines can be left with Mr. Sands at the office of the American Farmer, or with the subscriber.  
Jc 22 WM. MURRAY, Franklin, Balt. co. Md.

**PROUTY & MEARS' \$100 PREMIUM PLOUGH.**

Received at the office of the American Farmer, two sizes of the above celebrated plough, to which was awarded the prize of \$100 at the Massachusetts Fair. Farmers and others are invited to call and examine them. Orders received for them, as also for the Wiley and other ploughs, by  
m 30 SAML. SANDS.

**REAPING MACHINES, CORN AND COB CRUSHERS, CORN SHELLERS, &c. WARRANTED.**

The Reaping Machine stands alone, increasing in reputation from year to year, saving its first cost in one large crop in the waste alone, while the attempts of others, to construct machines for a similar purpose, are well known to be total failures. Those who wish to procure machines for the ensuing harvest, are requested to make early application to the subscriber, who has greatly improved them since last year. Corn and Cob Crushers, warranted superior to all others, also, Corn Shellers and Huskers constantly on hand at reduced prices.  
Jc 23 OBEDE HUSSEY.

**MILLWRIGHTING, PATTERN & MACHINE MAKING**

By the subscriber, York, near Light st. Baltimore, who is prepared to execute orders in the above branches of business at the shortest notice, and warrants all mills, &c. planned and executed by him to operate well.

Murray's Corn and Cob Crushers for hand power \$25  
Do. by horse power, from 6 to 12 bushels per hour, \$35 to \$40  
Corn Shellers, shelling from 30 to 300 bushels an hour, 15 to 75  
Portable and Stationary Horse Powers 75 to 150  
Self sharpening hand Mills, a superior article, 12  
Cylinder Straw and Oat cutters, 2 knives, 20 to 35  
Mill, carry log, and other Screws, 2 small Steam Engines 3 to 4 horse power. Any other machines built to order.

Patent rights for sale for the Endless Carriage for gang Saw Mills, a good invention.

Orders for crushers can be left with any of the following agents: Thos. Denny, Seedsman, Baltimore; J. F. Callan, Washington, D. C.; Calvin Wing, Norfolk; S. Sands, Farmer office; or the subscriber, JAS. MURRAY, Millwright, Baltimore.  
may 28 ly

**MARTINEAU'S IRON HORSE-POWER**

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware, and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Thrashing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shortest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment.  
R. B. CHENOWETH,  
corner of Front & Ploughman sts. near Baltimore st. Bridge, or No 20, Pratt street. Baltimore, mar 31, 1841

**MURRAY'S CORN & COB CRUSHERS.**

The subscribers, inventors and patentees of this most excellent machine, offer for sale the right to manufacture for any state or county in the U. States. That this machine will be adopted, and become in general use in the corn-growing districts of our country there can be no doubt, as it is satisfactorily ascertained that more than one-third of the value of the produce is lost by the waste of the cob, which being crushed and ground with the grain, is more valuable for stock than corn fed by itself, and we guarantee that our Crusher will do more and better work with the same power than any other machine of the kind now in use, and invite all manufacturers to a fair trial.

We have appointed Mr. SAMUEL SANDS the sole Agent for the sale of rights, who will give every necessary information to those desirous of purchasing. All letters must be post paid.

NOTICE—There are several machines infringing upon our patent CORN and COB CRUSHERS—we therefore forbid all persons from making, vending or using Corn Crushers having a tube or tubes for holding the ears of corn while they are broken, except such as have rights.  
JAS. & WM. MURRAY,  
Baltimore, Md.  
mh 2

**THE LIME KILNS.**

The subscriber, in order to meet the increasing demand for Lime for agricultural purposes, has established Kilns for burning the same on the Rock Point farm, belonging to the Messrs. Lancaster, in Charles county, Md. where he is ready to supply all demands for this section of the state, and the waters of the Potomac, on accommodating terms. Orders directed to him at Milton Hill Post Office, Md. will meet prompt attention.  
do 7 6m\* WM. M. DOWNING.

**LIME—LIME.**

The subscriber is prepared to furnish any quantity of Oyster Shell or Stone Lime of a very superior quality at short notice at their Kilns at Spring Garden, near the foot of Eutaw street Baltimore, and upon as good terms as can be had at any other establishment in the State.

He invites the attention of farmers and those interested in the use of the article, and would be pleased to communicate any information either verbally or by letter. The Kilns being situated immediately upon the water, vessels can be loaded very expeditiously.  
N.B. Wood received in payment at market price.  
an. 22 3m E. J. COOPER.

**BERKSHIRE SOWS, &c.**

For sale, several fine young SOWS, of thorough bred Berkshire breed, from stock equal to any in the United States. They are about 7 months old, and have just been put to a very fine boar of same breed; they will be sold a great bargain, (\$12 each) if immediately taken.

Also, a Bakewell Ram and Ewe, full bred, price \$20 for the first and \$15 for the latter—one year old this spring.

Also an imported China Sow, now in pig by a common boar; price \$0; she is a handsome animal of the breed.

Two Devon Heifers, 2 years old this spring, price \$30 each; two do. and a Bull 1 year old, each \$40, and a Bull 3 years old, \$50; and other animals of the same breed.  
Jc 22 S. SANDS.

**WOOL! WOOL! WOOL!**

The subscribers respectfully inform Farmers and others that they are prepared to manufacture wool into any kind of woollen goods required, in the best manner and at short notice.  
Full'd Kersey from 12 to 16 oz. clean wool per yd. 33 1-3c. per yd.  
Coarse Cloth, all wool, 1 1/2 lb clean wool " 37 1-2 "  
All other goods at prices in proportion.

OWINGS & MITCHELL,  
Owingsville, Howard Dist. A. A. Co. Md.

Wool received in payment of work. June 22 31

**AGRICULTURAL MACHINERY,**

Manufactured and for sale by A. G. & N. U. MOTT  
South east corner of Ensor and Forest sts. near the Bel-air market, Old Town, Baltimore.

Being the only agents for this state, are still manufacturing WJ. LEY'S PATENT DOUBLE POINTED COMPOSITION CAPT PLOUGH, which was so highly approved of at the recent Fair at Ellicott's Mills, and to which was awarded the palm of excellence at the Govanstown meeting over the \$100 Premium Plough, Property of Philadelphia, and Davis' of Baltimore, and which took the premium for several years at the Chester Co. Pa. fair—This plough is so constructed as to turn either end of the point when one wears dull—it is made of composition metal, warranted to stand stony or rocky land as well as steel wrought shares—in the wear of the mould board there is a piece of casting screwed on; by renewing this piece of metal, at the small expense of 25 or 50 cts. the mould board or plough will last as long as a half dozen of the ordinary ploughs. They are the most economical plough in use—We are told by numbers of the most eminent farmers in the state that they save the expense of \$10 a year in each plough. Every farmer who has an eye to his own interest will do well by calling and examining for himself. We always keep on hand a supply of Ploughs and composition Castings—Price of a 1-horse Plough \$5; for 2 or more horses, \$10.

We also make to order other Ploughs of various kinds. MOTT'S IMPROVED LARGE WHEAT FAN, which was so highly approved of at the recent Fair at Ellicott's Mills and at Govanstown, as good an article as there is in this country—prices from 22 to \$25.

A CORN SHELLER that will shell as fast as two men will throw in, and leave scarcely a grain on the cob nor break a cob, by manual power; price \$17.

CULTIVATORS with patent teeth, one of the best articles for the purpose in use, for cotton, corn and tobacco price \$4, extra set of teeth 1.

HARROWS of 3 kinds, from 7 to \$12.

GRAIN CRADLES of the best kind, \$4.

HARVEST TOOLS, &c.

Thankful for past favors we shall endeavor to merit a continuance of the same.  
ja 26 tf

**HARVEST TOOLS.**

IN STORE—Waldron & Griffin Grass SCYTHES, and superior Seythe Sneaths; 2 & 3 prong'd time Hay Forks; Boye do.; superior Pennsylvania made wooden Hay Forks; New England made Hay Rakes, treble bowed; superior made grain Cradles, with Waldron blades, the fingers adjusted by screws, several superior Horse Powers and Thrashing machines, the latter of various make, prices from \$25 to \$100 independent of the power; a few Wheat Fans (small size), also one very large size horizontal wheat Fan, a prime article; Corn Shellers, made with upright and stopping stands, both made in the very best manner; 120 Corn Cultivators, the hoes are of wrought iron and well steered; also, Tobacco Cultivators; a great variety of Cultivating Ploughs with wrought and cast shares—Likewise an extensive assortment of plough Castings at wholesale and retail. The stock of cylindrical Straw Cutters on hand is large, embracing all sizes of both iron and wood frames. The usual stock of other implements is large and too numerous to mention. All repairs done at short notice.  
J. S. EASTMAN,  
may 18 36 West Pratt st

**BERKSHIRE PIGS.**

A few pair of uncommonly fine BERKSHIRE PIGS, just two months old, the offspring of the best selected stock from the celebrated piggery of Mr. C. N. Bement, near Albany, N. Y. for sale at \$15 per pair. Judges who have seen them, pronounce them to be as fine as they ever saw.  
D. S. CARR.

Also, some choice pure blooded Durham Cattle; a remarkably fine full blooded Ayrshire Cow; a half Durham and Ayrshire Bull calf, 9 months old, and a beautiful half Durham and Devonshire two years old Bull. These cattle, it is believed, are not surpassed by any in the State, and will be sold on reasonable terms.  
Jc 15 7t D. S. C.

**BERKSHIRE PIGS.**

The subscriber will continue to receive orders for their spring litters of young Berkshire Pigs, from their valuable stock of breeder (for particulars of which, see their advertisement in No 34 or 37, Vol. 2 of this paper.) Price at their piggery \$15 per pair; cooped and delivered in, or shipped at the port of Baltimore, \$16 per pair. All orders post paid will meet with prompt attention—address,  
T. T. & E. GORSUCH.

Hereford, Baltimore Co. Md.

mh 23

**BERKSHIRE PIGS—DEVON CATTLE.**

For sale by

JOHN P. E. STANLEY,

Or apply at No. 50 S. Calvert St. Baltimore. The subscriber has for sale some very superior Berkshire Pigs of this spring's litters, from stock selected from the piggeries of Mr. Lossing and Mr. Bement, of Albany, which he will dispose of at reduced prices to suit the times, say \$15 per pair, deliverable in Baltimore—also some young Sows of same stock, now in pig. Apply as above.  
Jc 15

**DURHAMS.**

A gentleman who is overstocked, and without pasturage, will sell on terms that cannot fail to please, several very superior yearling Heifers, and a this spring's Bull calf; they are out of excellent milking stock, and from imported animals.  
S. SANDS.  
may 25 3t

**TO FARMERS.**

The subscriber has for sale at his Plaster and Bone Mill on Hughes street, south side of the Basin, GROUND PLASTER, GROUND BONES, OYSTER SHELL & STONE LIME, and LEACHED ASHES, all of the best quality for agricultural purposes, and at prices to suit the times.

Vessels loading at his wharf with any of the above articles, will not be subject to charges for dockage or wharfage.  
Jc 23

WM. TREGO, Baltimore.